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# ARTIFICIAL INTELLIGENCE DATA TECHNICIAN



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## LEARNER GUIDE

National Vocational Certificate Level 1

Version 1 - November, 2019



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## Introduction

Welcome to your Learner's Guide for the Artificial Intelligence Data Technician programme. It will help you to complete the programme and to go on to complete further study or go straight into employment.

The Artificial Intelligence Data Technician programme is to engage young people with a programme of development that will provide them with the knowledge, skills and understanding to start this career in Pakistan. The programme has been developed to address specific issues, such as the national, regional and local cultures, the manpower availability within the country, and meeting and exceeding the needs and expectations of their customers.

The main elements of your learner's guide are:

- **Introduction:**
  - This includes a brief description of your guide and guidelines for you to use it effectively
- **Modules:**
  - The modules form the sections in your learner's guide
- **Learning Units:**
  - Learning Units are the main sections within each module
- **Learning outcomes:**
  - Learning outcomes of each learning units are taken from the curriculum document
- **Learning Elements:**
  - This is the main content of your learner's guide with detail of the knowledge and skills (practical activities, projects, assignments, practices etc.) you will require to achieve learning outcomes stated in the curriculum
  - This section will include examples, photographs and illustrations relating to each learning outcome
- **Summary of modules:**
  - This contains the summary of the modules that make up your learner's guide
- **Frequently asked questions:**
  - These have been added to provide further explanation and clarity on some of the difficult concepts and areas. This further helps you in preparing for your assessment.
- **Multiple choice questions for self-test:**
  - These are provided as an exercise at the end of your learner's guide to help you in preparing for your assessment.

# ARTIFICIAL INTELLIGENCE DATA TECHNICIAN



Module-1

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## Module 1: 061900924 Module: Use Word Processing Software

### Objective of the module:

This Competency Standard identifies the competencies required to protect/apply occupational Safety, health and Environment at workplace according to the industry's approved guidelines, procedures and interpret environmental rules/regulations. Trainee will be expected to identify and use Personal Protective Equipment (PPE) according to the work place requirements. The underpinning knowledge regarding Observe Occupational Safety and Health (OSH) will be sufficient to provide the basis for the job at workplace.

**Duration** 100 hours      **Theory:** 20hours      **Practical:** 80hours

Learning Unit	Learning Outcomes	Learning Elements	Materials Required
LU1: Create a File	<p><b>You will be able to</b></p> <ol style="list-style-type: none"> <li>1. Launch word processing application</li> <li>2. Create a blank document</li> <li>3. Create from template</li> <li>4. Create content</li> <li>5. Identify saved location</li> </ol> <p>Save a document in desired format</p>	<ul style="list-style-type: none"> <li>• Demonstrate different ways to open word.</li> <li>• Demonstrate various options that are found on word opening screen.</li> </ul> <p>Show Highlight Menus, Taskbar, Ruler, Scroll bar etc.</p> <p>Practical-1</p>	<ol style="list-style-type: none"> <li>1. Computer system</li> <li>2. Microsoft Office</li> </ol> <p>Printer and paper rim</p>
		<p>Create a blank document/Template, type one line and then save the file on desktop. Open the file again and save in in PDF format.</p>	
LU2: Edit a File	<p><b>You will be able to</b></p> <ol style="list-style-type: none"> <li>1. Navigate in a document</li> <li>2. Select text or object</li> </ol>	<ul style="list-style-type: none"> <li>• Discuss various options found in Views (Menu/Group).</li> <li>• Describe difference in available Views.</li> </ul>	

Learning Unit	Learning Outcomes	Learning Elements	Materials Required
	<ol style="list-style-type: none"> <li>3. Find desired text</li> <li>4. Replace text</li> <li>5. Paste copied text</li> <li>6. Paste cut text</li> <li>7. Paste selected text from Clipboard</li> <li>8. Apply undo &amp; redo operations</li> <li>9. Apply spell check</li> <li>10. Apply grammar check</li> <li>11. Insert Objects</li> </ol>	<ul style="list-style-type: none"> <li>• Explain how to navigate document using mouse and keyboard.</li> <li>• Explain different pasting options in word processor and how clipboard retains copied items.</li> <li>• Describe ways to find and replace text.</li> <li>• Explain students about importance of running spelling and grammar check before sharing with others.</li> <li>• Show various options available in spelling and grammar menu.</li> </ul> <p>Explain the types of objects available in Insert Menu.</p> <p>Practical-1</p> <p>Open any two file exchange and exchange content of both file. Check for grammatical mistake in both the file. Insert common image in both the files.</p>	
<b>LU3:</b> Perform Word Formatting	<b>You will be able to</b> <ol style="list-style-type: none"> <li>1. Change font size</li> <li>2. Change font style</li> <li>3. Change font family</li> <li>4. Change font color</li> </ol>	<ol style="list-style-type: none"> <li>1. Show character formatting</li> <li>2. Demonstrate different font styles</li> <li>3. Illustrate different font family</li> <li>4. Demonstrate the use of highlighting</li> </ol> <p>Demonstrate the use of upper and lower cases</p> <p>Practical-1</p>	

Learning Unit	Learning Outcomes	Learning Elements	Materials Required
	5. Highlight the text 6. Apply predefined text style  Change case	Copy content form internet or any other file available/given (at least 5 lines), then make the following changes: 1. Change font style to Arial 2. Change font size to 12 3. Change its color to black 4. Highlight the text in red yellow color  Covert it to "Sentence Case"	
<b>LU4:</b> Perform Paragraph Formatting	<b>You will be able to</b> 1. Indent paragraph 2. Change line spacing 3. Align text 4. Create Lists with proper bullets and numbering	1. Explain indenting types in paragraph like First Line indent, Hanging indents and negative indents. 2. Demonstrate text alignment and its types 3. Demonstrate various options available in indents and spacing groups/dialog box. 4. Demonstrate indentation using rulers. 5. Illustrate Highlight available text alignments. e.g. right, left center and justified. 6. Explain difference between line spacing and paragraph spacing. 7. Describe Listing. 8. Demonstrate ordered, unordered and multilevel listing.  Practical-1  Copy content form internet or any other file available/given (at least 2 paragraphs), then	


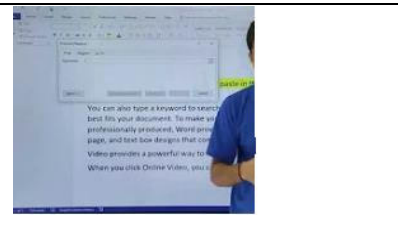



Learning Unit	Learning Outcomes	Learning Elements	Materials Required
		<p>make the following changes:</p> <ol style="list-style-type: none"> <li>1. Justify the paragraph</li> <li>2. Set line spacing to 1</li> </ol> <p>Create two level list (Level 1 with numbers and level two with bullets)</p>	
<p><b>LU5:</b> Perform Page Formatting</p>	<p><b>You will be able to</b></p> <ol style="list-style-type: none"> <li>1. Select page layout</li> <li>2. Select page Orientation</li> <li>3. Select page size</li> <li>4. Set page margins</li> <li>5. Insert headers &amp; Footer</li> <li>6. Insert line numbers</li> <li>7. Insert page borders and Shading</li> </ol>	<ul style="list-style-type: none"> <li>• Show two basic types of page orientation Show what are commonly used paper sizes</li> <li>• Demonstrate page margins and how they are used</li> <li>• Explain headers and footers and when they are required</li> <li>• Demonstrate line numbering and its uses</li> </ul> <p>Demonstrate page borders and shading; and why they are used</p> <p>Practical-1</p> <p>Make following changes to document:</p> <ol style="list-style-type: none"> <li>1. Change the orientation of document from portrait to landscape</li> <li>2. Set margins manually to 1*1 inch,</li> <li>3. Set page size to A4</li> <li>4. Insert page numbers in footer, and your registration number in header.</li> </ol> <p>1) Insert border outside borders and name as watermark in document.</p>	
		<ol style="list-style-type: none"> <li>1) Insert border outside borders and name as watermark in document.</li> </ol>	
<p><b>LU6:</b> Print</p>	<p><b>You will be able to</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate how to add a printer in</li> </ul>	

Learning Unit	Learning Outcomes	Learning Elements	Materials Required
documents	<ol style="list-style-type: none"> <li>1. Select printer</li> <li>2. Preview print</li> <li>3. Print selected pages</li> </ol>	<p>operating system.</p> <ul style="list-style-type: none"> <li>• Describe and show various options related to printing in word processor.</li> </ul> <p>Practical-1</p>	
		<ol style="list-style-type: none"> <li>2) Preview and adjust the margins, page alignments on legal size paper and print selected pages.</li> </ol>	

## Examples and illustrations

### Videos

	<p>how to create a word fileURL</p> <p><a href="https://www.youtube.com/results?search_query=how+to+create+a+word+file">https://www.youtube.com/results?search_query=how+to+create+a+word+file</a></p>
	<p>how to edit a word file</p> <p>URL</p> <p><a href="https://www.youtube.com/results?search_query=how+to+edit+a+word+file">https://www.youtube.com/results?search_query=how+to+edit+a+word+file</a></p>
	<p>Perform Word Formatting</p> <p>URL</p> <p><a href="https://www.youtube.com/results?search_query=%3A+Perform+Word+Formatting">https://www.youtube.com/results?search_query=%3A+Perform+Word+Formatting</a></p>



### Perform Paragraph Formatting

URL

[https://www.youtube.com/results?search\\_query=Perform+Paragraph+Formatting](https://www.youtube.com/results?search_query=Perform+Paragraph+Formatting)



### Perform Page Formatting

URL

[https://www.youtube.com/results?search\\_query=%3A+Perform+Page+Formatting](https://www.youtube.com/results?search_query=%3A+Perform+Page+Formatting)

## Example and Illustrations

### Relevant topics and web links

S.No	Links and definitions
1	Getting Started with Microsoft Word 2010 <a href="https://www.microsoft.com/en-pk/download/details.aspx?id=907">https://www.microsoft.com/en-pk/download/details.aspx?id=907</a>

## Module summary

Module Title and Aim	Learning Units	Duration
<p><b>Module 1:</b> Comply with Work Health and Safety Policies</p> <p><b>Aim:</b> This module aims to develop the knowledge, skills and understanding needed to comply with Work Health and Safety Policies</p>	<p><b>LU1:</b> Work safely at workplace  <b>LU2:</b> Communicate work health and safety (WHS) assess at work place  <b>LU3:</b> Minimize risks to personal safety at work place  <b>LU4:</b> Minimize risks to public safety at work place</p>	
<p><b>Module 2:</b> Obey the Workplace Policy and Procedure</p> <p><b>Aim:</b> This module aims to develop the knowledge, skills and understanding needed to understand the Workplace Policy and Procedure</p>	<p><b>LU1:</b> Obey the workplace personal appearance and hygiene  <b>LU2:</b> Follow work ethics  <b>LU3:</b> Demonstrate the Workplace behaviors  <b>LU4:</b> Communicate workplace policy &amp; procedures  <b>LU5:</b> Review the implementation of workplace policy &amp; procedures</p>	
<p><b>Module 3:</b> Follow Basic Communication (Specific)</p> <p><b>Aim:</b></p>	<p><b>LU1:</b> Adopt Effective listening to communicate appropriately  <b>LU2:</b> Develop Nonverbal communication with peers  <b>LU3:</b> Prepare for Interview to get a job  <b>LU4:</b> Use communication platform at workplace</p>	30 hours

Module Title and Aim	Learning Units	Duration
<p>This module aims to develop the knowledge, skills and understanding needed to follow Basic Communication (Specific)</p>	<p><b>LU5:</b> Identify communication barriers to improve interpersonal skills</p>	
<p><b>Module 4:</b> Demonstrate Basic Literary Skills <b>Aim:</b> This module aims to develop the knowledge, skills and understanding needed to Demonstrate Basic Literary Skills</p>	<p><b>LU1:</b> Apply basic Literacy skills</p>	<p>40 hours</p>
<p><b>Module 5:</b> Operate Computer Functions <b>Aim:</b> This module aims to develop the knowledge, skills and understanding needed to Operate Computer Functions</p>	<p><b>LU1:</b> Setup Computer for Use <b>LU2:</b> Organize files in a folder <b>LU3:</b> Shutdown the computer system</p>	<p>120 hours</p>
<p><b>Module 6:</b> Use of word processing software <b>Aim:</b> This module aims to develop the</p>	<p><b>LU1:</b> Create a file <b>LU2:</b> Edit a file <b>LU3:</b> Perform word formatting <b>LU4:</b> Perform paragraph formatting</p>	<p>100 hrs</p>

<b>Module Title and Aim</b>	<b>Learning Units</b>	<b>Duration</b>
knowledge, skills and understanding needed to Use of spreadsheets	<b>LU5:</b> Perform page formatting <b>LU6:</b> Print documents	



## Frequently Asked Questions

<p>1. What is Competency Based Training (CBT) and how is it different from currently offered trainings in institutes?</p>	<p>Competency-based training (CBT) is an approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of completing a program of training. Compared to conventional programs, the competency based training is not primarily content based; it rather focuses on the competence requirement of the envisaged job role. The whole qualification refers to certain industry standard criterion and is modularized in nature rather than being course oriented.</p>
<p>2. What is the passing criterion for CBT certificate?</p>	<p>You shall be required to be declared “Competent” in the summative assessment to attain the certificate.</p>
<p>3. What are the entry requirements for this course?</p>	<p>The entry requirement for this course is 8th Grade or equivalent.</p>
<p>4. How can I progress in my educational career after attaining this certificate?</p>	<p>You shall be eligible to take admission in the National Vocational Certificate Level-3 in Artificial Intelligence Data Technician). You shall be able to progress further to National Vocational Certificate Level-4 in Artificial Intelligence Data Technician (Supervisor); and take admission in a level-5, DAE or equivalent course. In certain case, you may be required to attain an equivalence certificate from The Inter Board Committee of Chairmen (IBCC).</p>
<p>5. If I have the experience and skills mentioned in the competency standards, do I still need to attend the course to attain this certificate?</p>	<p>You can opt to take part in the Recognition of Prior Learning (RPL) program by contacting the relevant training institute and getting assessed by providing the required evidences.</p>
<p>6. What is the entry requirement for Recognition of Prior Learning program (RPL)?</p>	<p>There is no general entry requirement. The institute shall assess you, identify your competence gaps and offer you courses to cover the gaps; after which you can take up the final assessment.</p>
<p>7. Is there any age restriction for entry in this course or Recognition of Prior Learning program (RPL)?</p>	<p>There are no age restrictions to enter this course or take up the Recognition of Prior Learning program</p>

8. What is the duration of this course?	The duration of the course work is 3220 hours
9. What are the class timings?	The classes are normally offered 25 days a month from 08:00am to 01:30pm. These may vary according to the practices of certain institutes.
10. What is equivalence of this certificate with other qualifications?	As per the national vocational qualifications framework, the level-4 certificate is equivalent to Matriculation. The criteria for equivalence and equivalence certificate can be obtained from The Inter Board Committee of Chairmen (IBCC).
11. What is the importance of this certificate in National and International job market?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTTC). These standards are also recognized worldwide as all the standards are coded using international methodology and are accessible to the employers worldwide through NAVTTTC website.
12. Which jobs can I get after attaining this certificate? Are there job for this certificate in public sector as well?	You shall be able to take up jobs in the artificial intelligence data technician industry which comprises of development of applications for play store as well as testing and optimization of the apps.
13. What are possible career progressions in industry after attaining this certificate?	You shall be able to progress up to the level of supervisor after attaining sufficient experience, knowledge and skills during the job. Attaining additional relevant qualifications may aid your career advancement to even higher levels.
14. Is this certificate recognized by any competent authority in Pakistan?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTTC). The official certificates shall be awarded by the relevant certificate awarding body.
15. Is on-the-job training mandatory for this certificate? If yes, what is the duration of on-the-job training?	On-the-job training is not a requirement for final / summative assessment of this certificate. However, taking up on-the-job training after or during the course work may add your chances to get a job afterwards.
16. How much salary can I get on job after attaining this certificate?	The minimum wages announced by the Government of Pakistan in 2019 are PKR 17,500. This may vary in subsequent years and different regions of the country. Progressive employers may pay more than the

	mentioned amount.
17. Are there any alternative certificates which I can take up?	There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field.
18. What is the teaching language of this course?	The teaching language of this course is Urdu and English.
19. Is it possible to switch to other certificate programs during the course?	There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field.
20. What is the examination / assessment system in this program?	Competency based assessments are organized by training institutes during the course which serve the purpose of assessing the progress and preparedness of each student. Final / summative assessments are organized by the relevant qualification awarding bodies at the end of the certificate program. You shall be required to be declared "Competent" in the summative assessment to attain the certificate.
21. Does this certificate enable me to work as freelancer?	You can start your small business/ software house related to artificial intelligence data technician and you can work as freelancer as well after the completion of the course. You may need additional skills on entrepreneurship to support your initiative.

## Test Yourself (Multiple Choice Questions)

**MODULE 5 Use Word Processing Software**

**Question 1** Which of the following typeface applies to characters.

A Font

B Paragraph Style

C Point Size

D Indent

**Question 2** Which option would you use?  
If you type a paragraph, in uppercase and need to change it to sentence case without having to retype the paragraph,

A Change Case

B Change Size of Case

C Sentence Case

D Toggle Case

**Question 3** Which feature starts a new line whenever a word or sentence reached a border?

A Text Line

B New Line

C Text Wrapping

D Text Align

**Question 4** What is the shortcut key for finding text?

A Ctrl+H.

B Ctrl+F.

C Ctrl+G.

D Ctrl+5

**Question 5** Which of the following is NOT a type of indent?

A Hanging

B Negative

C Positive

D First-line


## National Vocational and Technical Training Commission (NAVTTTC)

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